

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows, without prejudice or disclaimer.

1. (Currently amended) A method for inducing an immune response to a tumor antigen in an animal comprising a priming step wherein a tumor antigen is administered in a first form directly into a lymphatic site node ~~of an animal~~ and a boosting step wherein the tumor antigen is administered in a second form directly into a lymphatic site node ~~of the animal~~, where the first and second forms ~~of the tumor antigen administered in the priming and boosting steps~~ are different and at least one of said forms is administered directly into a lymph node.
2. (Previously Amended) A method according to claim 1 wherein the tumor antigen is selected from the group consisting of CEA, gp100, the MAGE family of proteins, DAGE, GAGE, RAGE, NY-ESO 1, Melan-A/MART 1, TRP-1, TRP-2, tyrosinase, HER-2/neu, MUC-1, p53, KSA, PSA, PSMA, fragments thereof and modified versions thereof.
3. Cancelled
4. (Previously Amended) A method according to claim 1 wherein at least one of said forms is a nucleic acid encoding the tumor antigen and the nucleic acid is selected from the group consisting of viral nucleic acid, bacterial DNA, plasmid DNA, naked DNA, and RNA.
5. (Original) A method according to claim 4 wherein the viral nucleic acid is selected from the group consisting of adenoviral, alphaviral and poxviral nucleic acid.
6. (Original) A method according to claim 5 wherein the poxviral nucleic acid selected from the group consisting of avipox, orthopox and suipox nucleic acid.

7. (Original) A method according to claim 5 wherein the poxviral nucleic acid is selected from the group consisting of vaccinia, fowl pox, canarypox and swinepox nucleic acid.
8. (Original) A method according to claim 5 wherein the poxviral nucleic acid is selected from the group consisting of MVA, NYVAC, TROVAC, and ALVAC nucleic acid.
9. (Previously Amended) A method according to claim 1 wherein at least one of said forms is a nucleic acid encoding the tumor antigen and the nucleic acid is contained in a vector.
10. (Original) A method according to claim 9 wherein the vector is a recombinant virus or bacteria.
11. (Original) A method according to claim 10 wherein the recombinant virus is selected from the group consisting of adenovirus, alphavirus and poxvirus.
12. (Original) A method according to claim 11 wherein the poxvirus is selected from the group consisting of avipox, orthopox and suipox.
13. (Original) A method according to claim 11 wherein the poxvirus is selected from the group consisting of vaccinia, fowlpox, canarypox and swinepox.
14. (Original) A method according to claim 11 wherein the poxvirus is selected from the group consisting of MVA, NYVAC, TROVAC, and ALVAC.
15. (Previously Amended) A method according to claim 1 wherein at least one of said forms is a nucleic acid encoding the tumor antigen and the nucleic acid is contained in a cell.

16. (Previously Amended) A method according to claim 1 wherein at least one of said forms is a nucleic acid encoding the tumor antigen and the nucleic acid is contained in a pharmaceutical composition.
17. (Previously Amended) A method according to claim 1 wherein the tumor antigen is selected from the group consisting of gp100, carcinoembryonic antigen (CEA), a fragment of gp100, a fragment of CEA, a modified version of gp100, and a modified version of CEA.
18. (Previously Amended) A method according to claim 17 wherein the modified version of gp100 comprises at least the sequence IMDQVPFSY (SEQ ID NO: 1) or the sequence YLEPGPVTV (SEQ ID NO:2).
19. (Previously Amended) A method according to claim 17 wherein the modified version of CEA comprises at least the sequence shown in Figure 8 (SEQ ID NO:112) or the sequence YLSGADLNL (SEQ ID NO:113).
20. Cancelled
21. (Original) A method according to claim 1 wherein the first form is a nucleic acid and the second form is a peptide.
22. (Original) A method according to claim 21 wherein the tumor antigen is selected from the group consisting of CEA, gp100, the MAGE family of proteins, DAGE, GAGE, RAGE, NY-ESO 1, Melan-A/MART 1, TRP-1, TRP-2, tyrosinase, HER-2/neu, MUC-1, p53, KSA, PSA, PSMA, fragments thereof, and modified versions thereof.
23. (Original) A method according to claim 21 wherein the nucleic acid is selected from the group consisting of viral nucleic acid, bacterial DNA, plasmid DNA, naked DNA, and RNA.

24. (Original) A method according to claim 23 wherein the viral nucleic acid is selected from the group consisting of adenoviral, alphaviral and poxviral nucleic acid.
25. (Original) A method according to claim 24 wherein the poxviral nucleic acid selected from the group consisting of avipox, orthopox and suipox nucleic acid.
26. (Original) A method according to claim 25 wherein the poxviral nucleic acid is selected from the group consisting of vaccinia, fowl pox, canarypox and swinepox nucleic acid.
27. (Original) A method according to claim 26 wherein the poxviral nucleic acid is selected from the group consisting of MVA, NYVAC, TROVAC, and ALVAC nucleic acid.
- 28-31. Canceled
32. (New) The method of claim 1 wherein both a humoral and cell mediated immune response greater than that produced by subcutaneous immunization are observed.
33. (New) The method of claim 1 wherein the tumor antigen is not co-administered with an adjuvant.